

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No. 40399/177/NIHD

In re patent application of

Jerry M. Keith

Serial No. 07/542,149

Filed: June 22, 1990

For: PERTUSSIS TOXIN GENE:  
CLONING AND EXPRESSION

Group Art Unit: 1814 GROUP 180

Examiner: G. Bugaisky

RECEIVED

APR 20 1994

SUPPLEMENTAL AMENDMENT AND REQUEST FOR RECONSIDERATION  
UNDER 37 CFR §1.116

The Honorable Commissioner of  
Patents and Trademarks  
Washington, D.C. 20231

Attn: BOX AF

Sir:

Further to applicant's response and Notice of Appeal filed December 13, 1993, applicant requests entry of the following amendments.

IN THE SPECIFICATION

Please substitute the attached page 22 for existing page 22 of the specification.

IN THE CLAIMS

Please amend claim 11 as follows:

11. (Twice amended) A DNA molecule encoding a substantially detoxified mutant of [at least a portion of the sequence of] the mature S1 subunit of *Bordetella pertussis* toxin, said mutant comprising amino acids proline 3 to phenylalanine 235 of the mature S1 subunit of Table 2 [an epitope that contributes to immunoprotection against *Bordetella pertussis* toxicity], wherein said DNA encodes a mutation [wherein] in which arginine 9 is replaced with another amino acid.

OK to enter lfeB